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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/516,176	03/01/2000	Takayoshi Sasaki	PM 266297	3428

7590 04/28/2010  
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WASHINGTON, DC 20036-3307

EXAMINER
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LE, HOA T

ART UNIT	PAPER NUMBER
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1787

MAIL DATE	DELIVERY MODE
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04/28/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/516,176	<b>Applicant(s)</b> SASAKI ET AL.	
	<b>Examiner</b> H. (Holly) T. Le	<b>Art Unit</b> 1787	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,8,9,18-21,23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-6,8,9,18 and 19 is/are allowed.
- 6) ☒ Claim(s) 1,2,23 and 25 is/are rejected.
- 7) ☒ Claim(s) 20 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/25/08</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on June 25, 2008 has been entered.

### ***35 USC § 112- first paragraph issue***

2. It is noticed that questions are raised in an European patent application related to the present application regarding the sufficient description of the method of making the claimed hollow particles. See papers filed June 25, 2008. However, it is the Examiner's opinion that the instant specification meets the written description and enablement requirement of the first paragraph of 35 U.S.C. 112. Process parameters and conditions for the spray-drying process to form the claimed hollow particle are described in details in the instant specification. Various applicable spraying methods are disclosed and each method is described in details (pages 9-10). Spraying condition, i.e. drying temperature are also discussed (page 10, lines 5-22). Conditions of the starting materials required to achieve the diameter of the shell of the hollow particle are described including viscosity of 5-10,000 cP, and the particle dimensions (page 11). Spraying conditions including dispersing medium, concentration of the titania sol,

reaction mixture for the decomposition, etc.. are described at page 11 to page 13.

Therefore, the specification meets the written description and enablement requirement of the first paragraph of 35 U.S.C. 112.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 23 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 601 594 ("EP'594).

EP'594 teaches a hollow particle (i.e. microballoon) comprising a shell of titania particles stuck together (i.e. sintered or fused together). See page 2, lines 28-33 and 45-48. The hollow particle has a diameter of 0.1 to 300  $\mu\text{m}$  and a bulk density of 0.01 to 2.0  $\text{g/cm}^3$  (page 4, lines 26-35); therefore, the ratio between the shell diameter and the wall thickness is necessarily within 50 to 5000.

### ***Allowable Subject Matter***

5. Claims 4-6, 8, 9, 18 and 19 are allowed.

6. Claims 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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7. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art references of record, singly or combined, teach or suggest a method of making hollow particles comprising laminated titania stuck together by spray-drying an exfoliated titania sol. The EP'594 suggests a spraying method but there is not drying but high-temperature heating to fuse the evaporated droplets. In addition, EP'594 does not teach spraying exfoliated titania sol. With regard to claims 20 and 21, the microballoons taught by EP'594 are used as fillers to reduce density in solid materials. Therefore, it would not have been obvious to use the microballoons taught by EP'594 in making a cosmetic composition.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. (Holly) T. Le whose telephone number is 571-272-1511. The examiner can normally be reached on 12:30 p.m. to 9:00 p.m. (EST), Mondays to Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. (Holly) T. Le/  
Primary Examiner, Art Unit 1787

April 26, 2010